1. (Currently Amended) A method of welding comprising:

positioning a monomer which is at least partially cured without substantial damage by temperatures ~~produced~~ produced during friction stir welding between surfaces to be welded together, and

friction stir welding at least portions of the surfaces through the monomer to form a welded joint and to form a corrosion barrier sealant adjacent the welded joint between the surfaces by at least partially curing the monomer.

2. - 3. (Canceled)

4. (Currently Amended) ~~The invention of claims 1 or 28 wherein positioning the monomer further comprises:~~ A method of welding comprising:

positioning a monomer, which is at least partially cured without substantial damage by temperatures produced during friction stir welding, between surfaces to be welded together;

partially curing the monomer before welding; and

friction stir welding at least portions of the surfaces through the monomer to form a welded joint and to form a sealant adjacent the welded joint between the surfaces by at least partially curing the monomer.

5. (Previously Amended) The invention of claim 4 wherein welding further comprises:

completing the curing of the monomer.

6. (Previously Amended) The invention of claims 1 or 28 wherein positioning the monomer further comprises:

applying an adhesive monomer.

7. (Canceled)

8. (Currently Amended) ~~The invention of claims 1 or 28 wherein positioning the monomer further comprises:~~ A method of welding comprising:

applying an adhesive monomer, ~~and~~ which is at least partially cured without substantial damage by temperatures produced during friction stir welding, between surfaces to be welded together;

partially curing the monomer before welding; and

friction stir welding at least portions of the surfaces through the monomer to form a welded joint and to form a sealant adjacent the welded joint between the surfaces by at least partially curing the monomer

9. (Previously Amended) The invention of claims 1 or 28 wherein welding to cure the monomer further comprises:

polymerizing the monomer.

10. (Canceled)

11. (Previously Amended) The invention of claims 1 or 28 further comprising:

applying heat to cure the monomer.

12. (Currently Amended) ~~The invention of claim 11 wherein applying heat further comprises:~~ A method of welding comprising:

positioning a monomer, which is at least partially cured without substantial damage by temperatures produced during friction stir welding, between surfaces to be welded together;

applying heat in the form of laser energy to cure the monomer; and

friction stir welding at least portions of the surfaces through the monomer to form a welded joint and to form a sealant adjacent the welded joint between the surfaces by at least partially curing the monomer.

13. (Previously Amended) The invention of claims 1 or 28 wherein welding further comprises:

forming a lap joint.

14. (Previously Amended) The invention of claims 1 or 28 wherein positioning a monomer further comprises:

applying an elastomeric monomer.

15. (Previously Amended) The invention of claim 14 wherein positioning a monomer further comprises:

applying a fluoroelastomeric monomer.

16. - 27. (Canceled)

28. (Previously Presented) The invention of claim 1 further comprising:

selecting a monomer through which a welded joint can be formed by friction stir welding without substantial degradation of the welded joint.

29. (New) A method of welding comprising:

selecting a monomer through which a welded joint can be formed by friction stir welding without substantial degradation of the welded joint;

positioning the monomer, which is at least partially cured without substantial damage by temperatures produced during friction stir welding, between surfaces to be welded together;

partially curing the monomer before welding; and

friction stir welding at least portions of the surfaces through the monomer to form a welded joint and to form a sealant adjacent the welded joint between the surfaces by at least partially curing the monomer.

30. (New) The invention of claim 29 wherein welding further comprises:

completing the curing of the monomer.

31. (New) A method of welding comprising:

selecting an adhesive monomer through which a welded joint can be formed by friction stir welding without substantial degradation of the welded joint;

applying the monomer, which is at least partially cured without substantial damage by temperatures produced during friction stir welding, between surfaces to be welded together;

partially curing the monomer before welding; and

friction stir welding at least portions of the surfaces through the monomer to form a welded joint and to form a sealant adjacent the welded joint between the surfaces by at least partially curing the monomer;

32. (New) A method of welding comprising:

selecting an adhesive monomer through which a welded joint can be formed by friction stir welding without substantial degradation of the welded joint;

positioning the monomer, which is at least partially cured without substantial damage by temperatures produced during friction stir welding, between surfaces to be welded together;

applying heat in the form of laser energy to cure the monomer; and

friction stir welding at least portions of the surfaces through the monomer to form a welded joint and to form a sealant adjacent the welded joint between the surfaces by at least partially curing the monomer

33. (New) A method of welding comprising:

selecting a monomer which forms a corrosion barrier when cured;

positioning the monomer between surfaces to be welded together; and

curing the monomer by friction stir welding at least portions of the surfaces through the monomer to form a welded joint surrounded by a corrosion barrier sealant between the surfaces.

34. (New) The invention of claim 33 further comprising:

at least partially curing the monomer before welding.

35. (New) The invention of claim 34 wherein the monomer is an adhesive monomer.